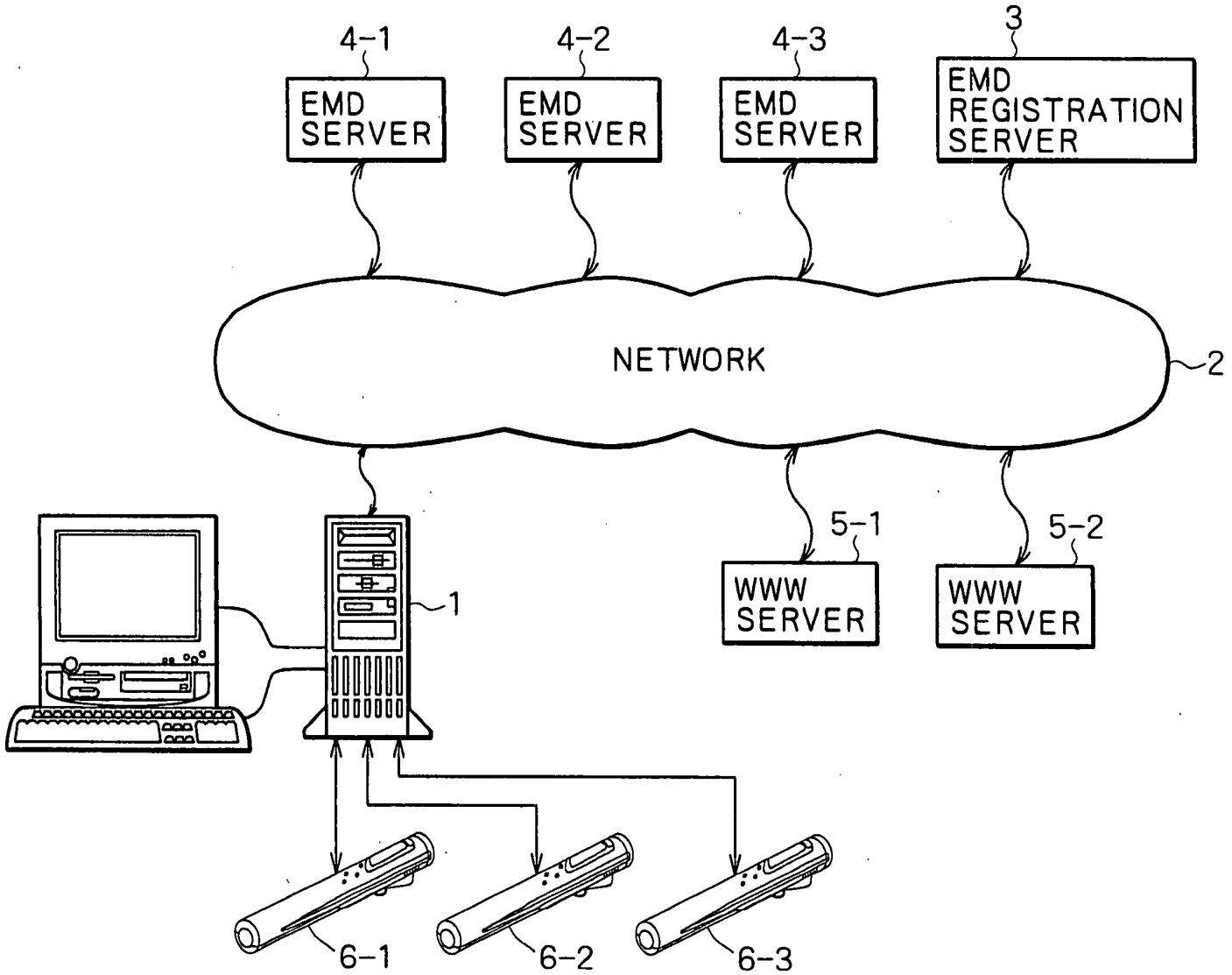
FUJITSU LIMITED

FIG. 1



F1G.1

FIG. 2

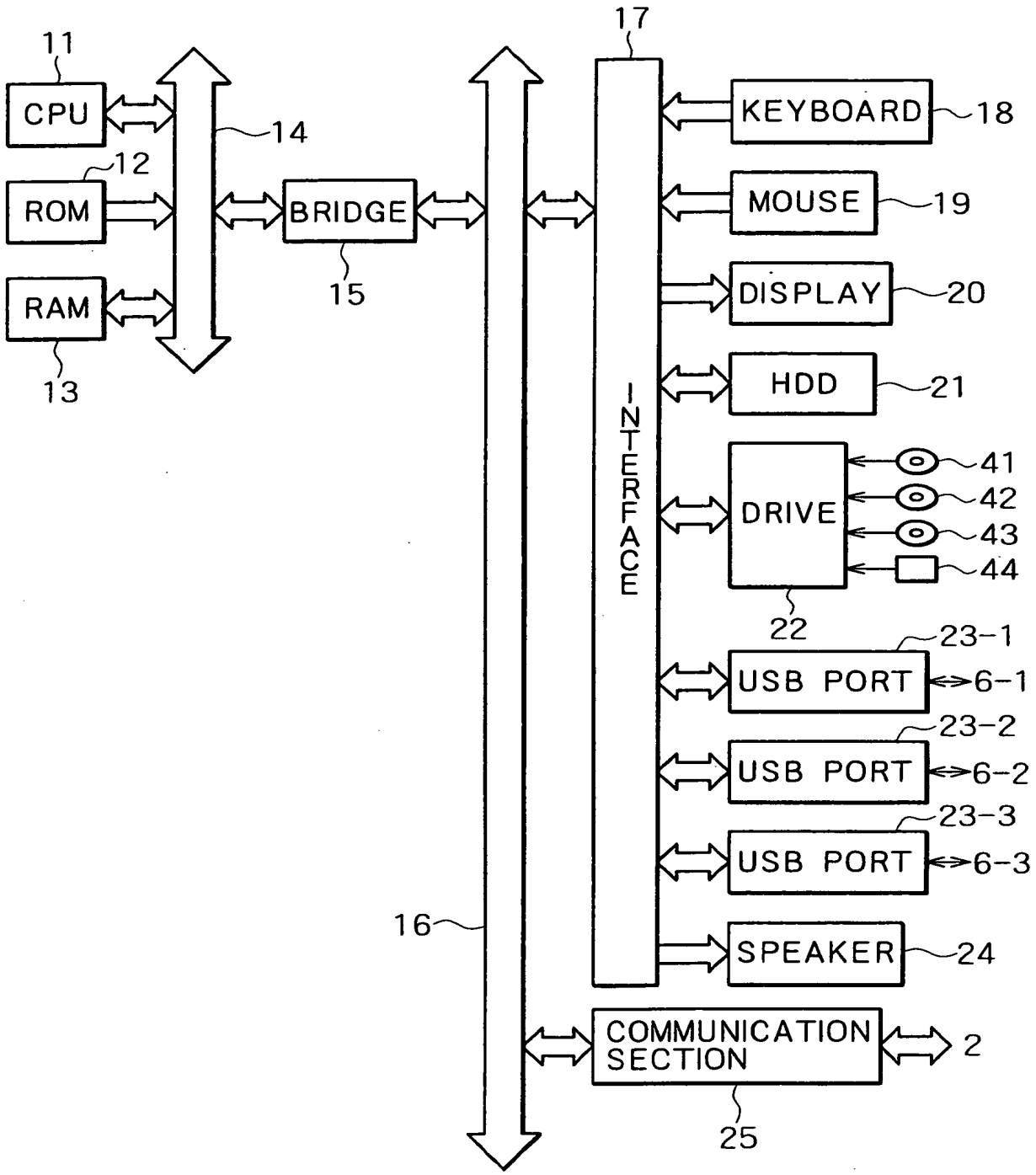

11
CPU
12
ROM
RAM
13
14
BRIDGE
15
16
17
INTERFACE
KEYBOARD
18
MOUSE
19
DISPLAY
20
HDD
21
DRIVE
41
42
43
44
22
23-1
USB PORT
6-1
23-2
USB PORT
6-2
23-3
USB PORT
6-3
SPEAKER
24
COMMUNICATION SECTION
2
25

FIG. 3

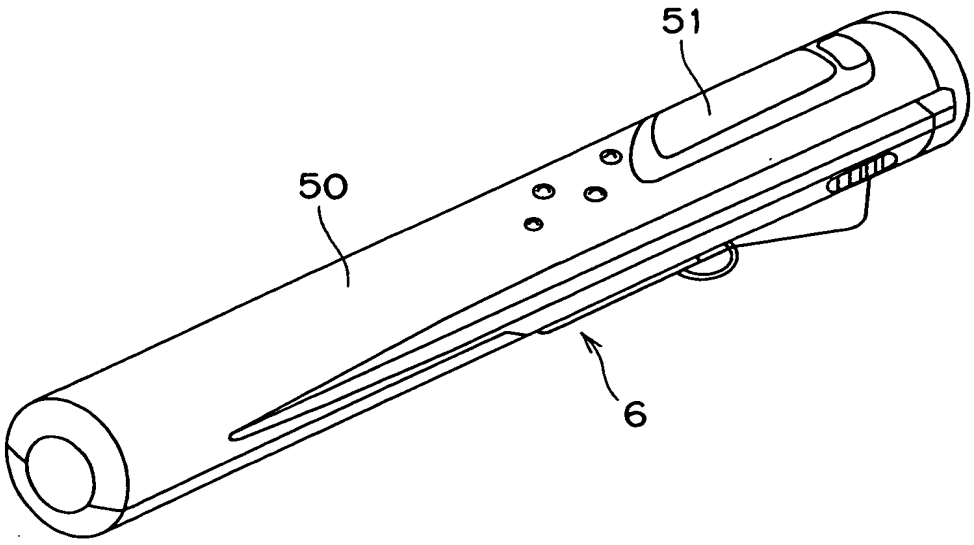


FIG. 4A

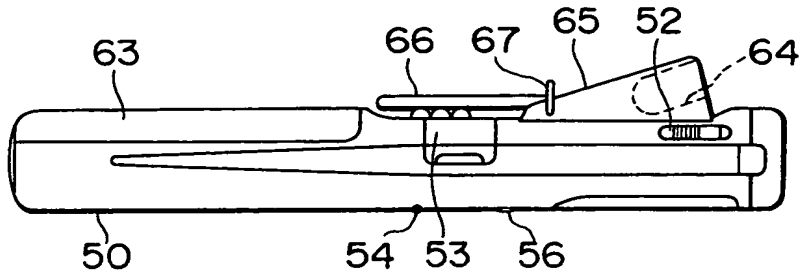


FIG. 4B

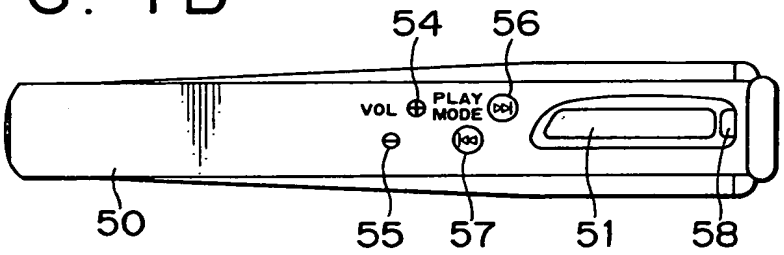


FIG. 4E

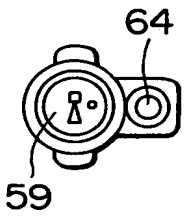


FIG. 4C

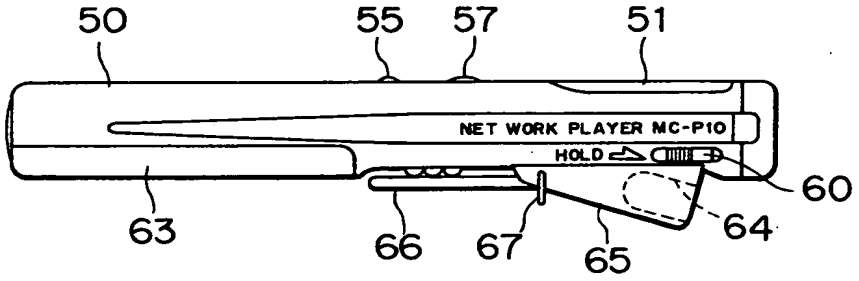


FIG. 4D

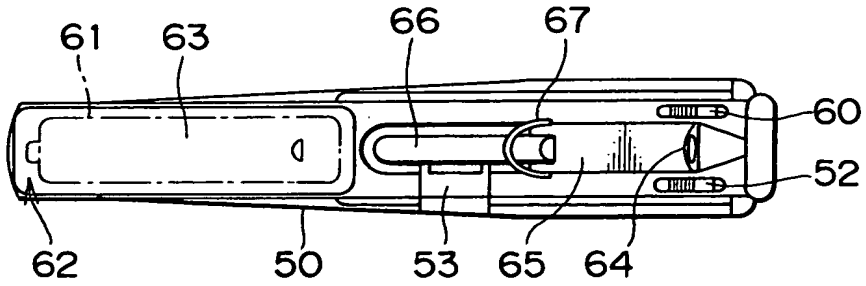


FIG.5

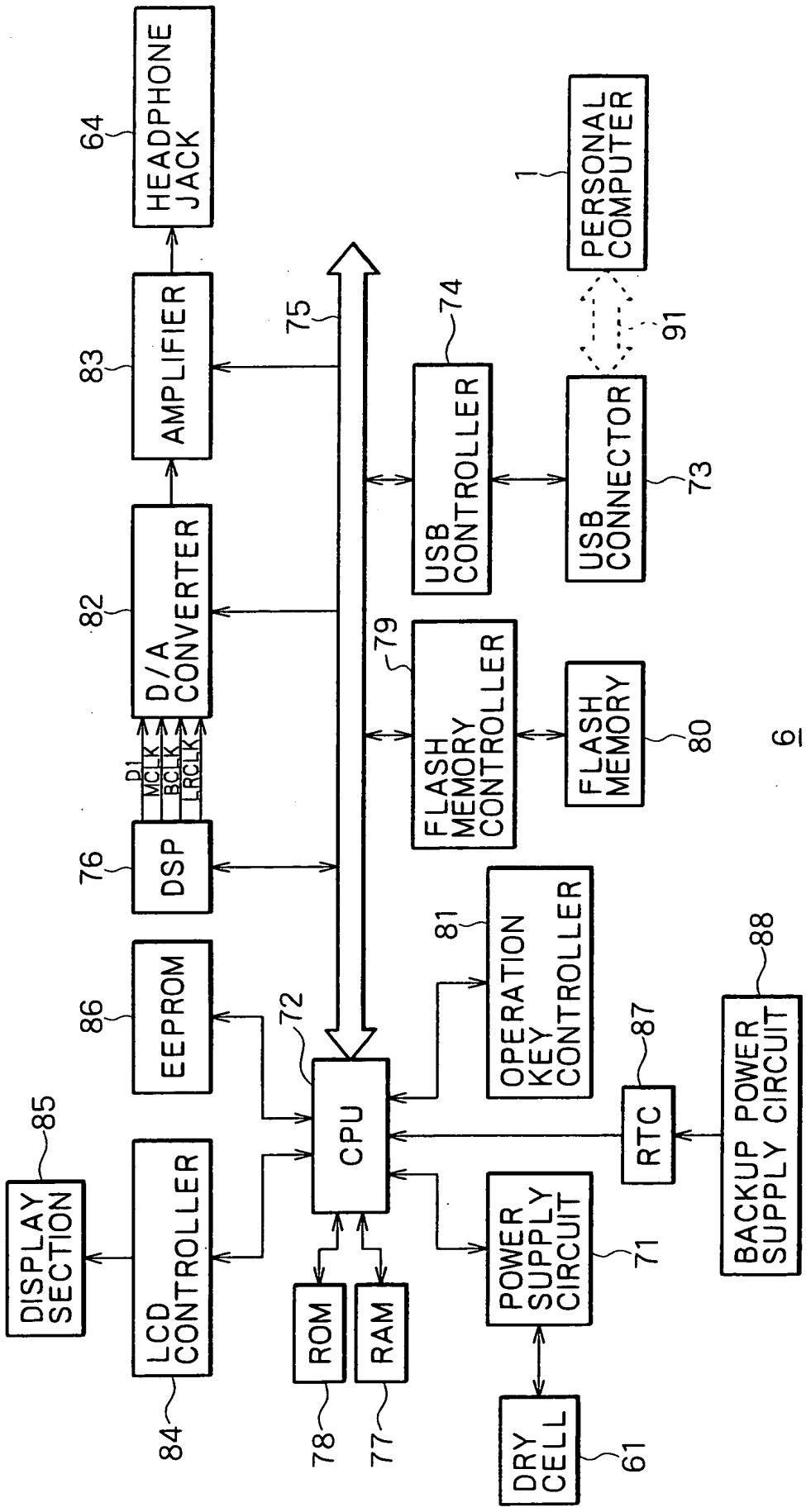

HEADPHONE JACK
64
AMPLIFIER
83
D/A CONVERTER
82
DSP
76
D1
MCLK
BCLK
LRCLK
EEPROM
86
CPU
72
75
USB CONTROLLER
74
USB CONNECTOR
73
PERSONAL COMPUTER
1
91
FLASH MEMORY CONTROLLER
79
FLASH MEMORY
80
OPERATION KEY CONTROLLER
81
RTC
87
BACKUP POWER SUPPLY CIRCUIT
88
DISPLAY SECTION
85
LCD CONTROLLER
84
ROM
78
RAM
77
POWER SUPPLY CIRCUIT
71
DRY CELL
61
6

FIG. 6

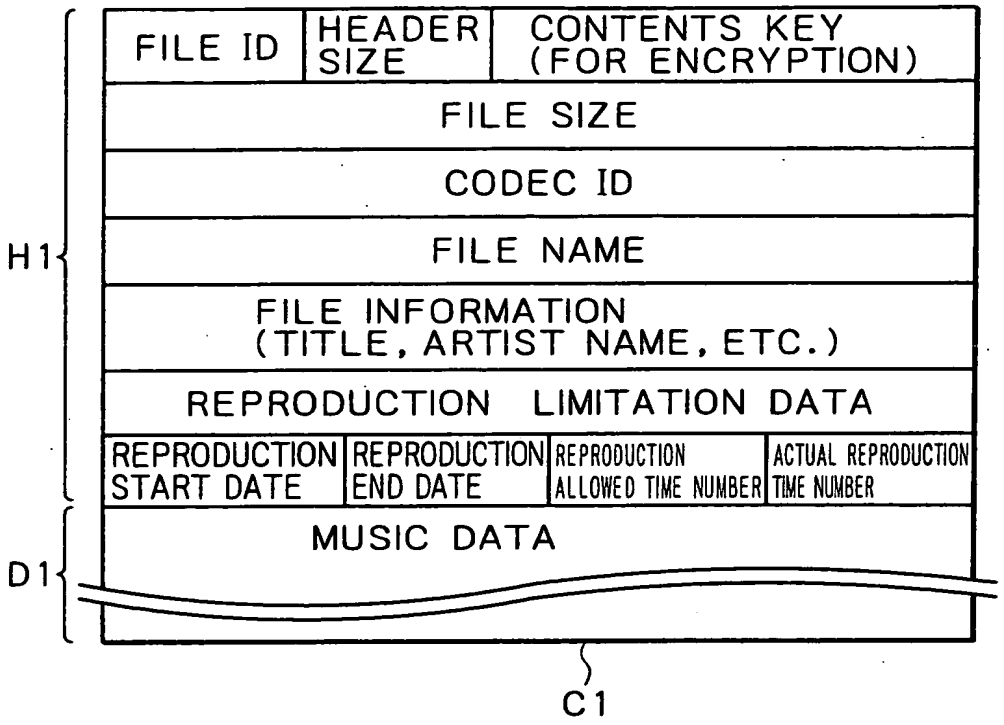

FILE ID
HEADER SIZE
CONTENTS KEY (FOR ENCRYPTION)
FILE SIZE
CODEC ID
FILE NAME
FILE INFORMATION (TITLE, ARTIST NAME, ETC.)
REPRODUCTION LIMITATION DATA
REPRODUCTION START DATE
REPRODUCTION END DATE
REPRODUCTION ALLOWED TIME NUMBER
ACTUAL REPRODUCTION TIME NUMBER
MUSIC DATA
H1
D1
C1

FIG. 7

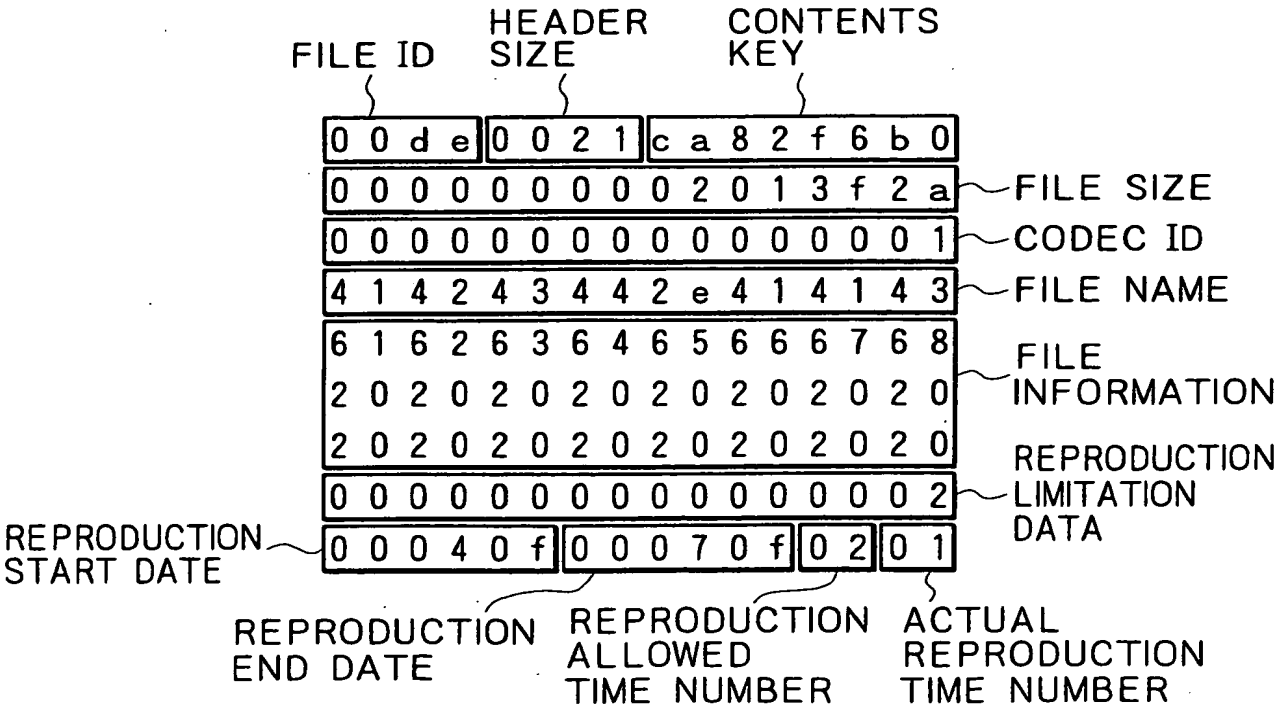

FILE ID
HEADER SIZE
CONTENTS KEY
0 0 d e
0 0 2 1
c a 8 2 f 6 b 0
0 0 0 0 0 0 0 0 2 0 1 3 f 2 a
FILE SIZE
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
CODEC ID
4 1 4 2 4 3 4 4 2 e 4 1 4 1 4 3
FILE NAME
6 1 6 2 6 3 6 4 6 5 6 6 6 7 6 8
2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0
2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0
FILE INFORMATION
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2
REPRODUCTION LIMITATION DATA
REPRODUCTION START DATE
0 0 0 4 0 f
0 0 0 7 0 f
0 2
0 1
REPRODUCTION END DATE
REPRODUCTION ALLOWED TIME NUMBER
ACTUAL REPRODUCTION TIME NUMBER

FIG. 8

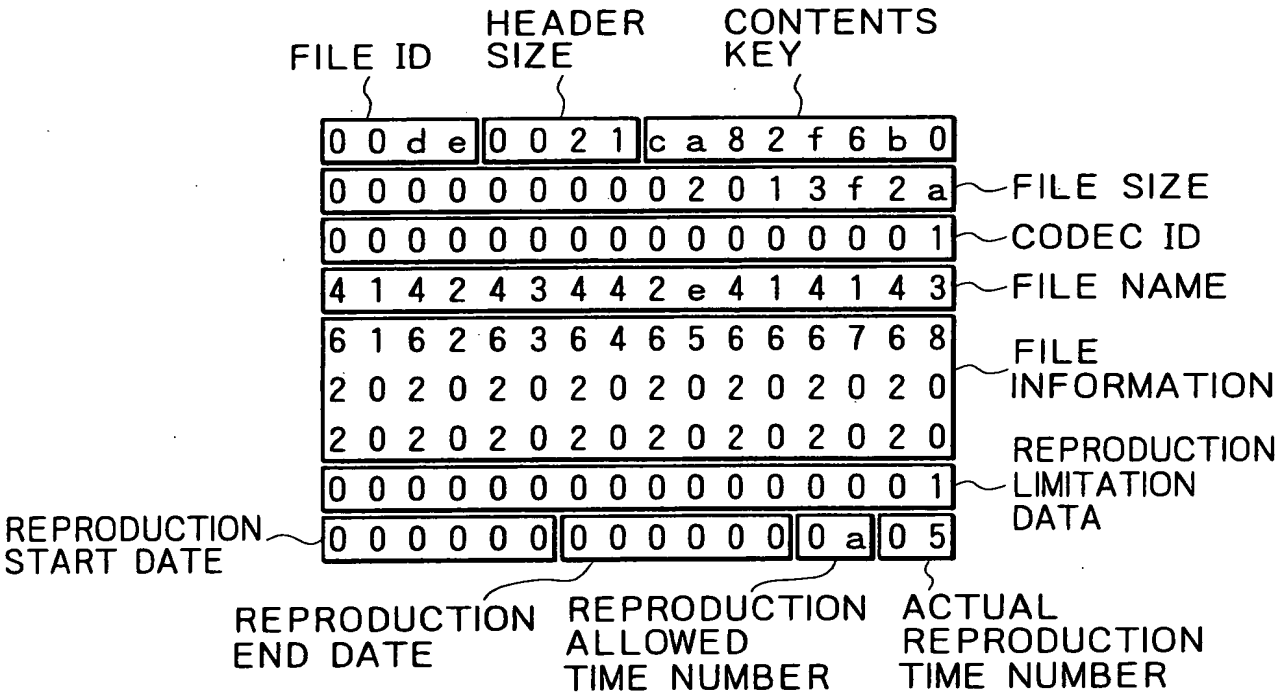

FILE ID
HEADER SIZE
CONTENTS KEY
0 0 d e
0 0 2 1
c a 8 2 f 6 b 0
0 0 0 0 0 0 0 0 2 0 1 3 f 2 a
FILE SIZE
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
CODEC ID
4 1 4 2 4 3 4 4 2 e 4 1 4 1 4 3
FILE NAME
6 1 6 2 6 3 6 4 6 5 6 6 6 7 6 8
2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0
2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0
FILE INFORMATION
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
REPRODUCTION LIMITATION DATA
REPRODUCTION START DATE
0 0 0 0 0 0
0 0 0 0 0 0
0 a
0 5
REPRODUCTION END DATE
REPRODUCTION ALLOWED TIME NUMBER
ACTUAL REPRODUCTION TIME NUMBER

FIG. 9A

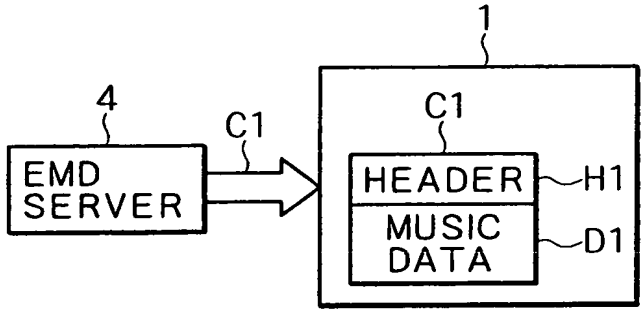


FIG. 9B

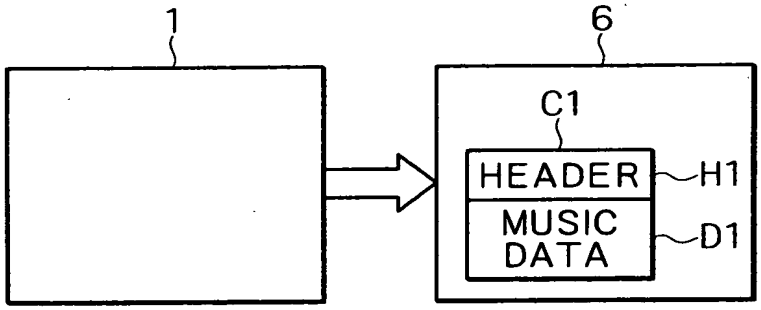


FIG. 9C

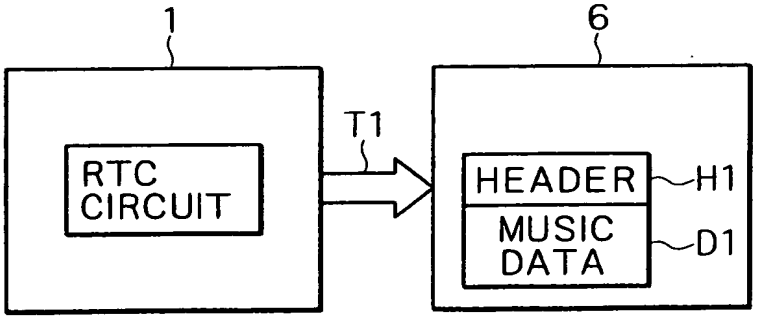


FIG. 10

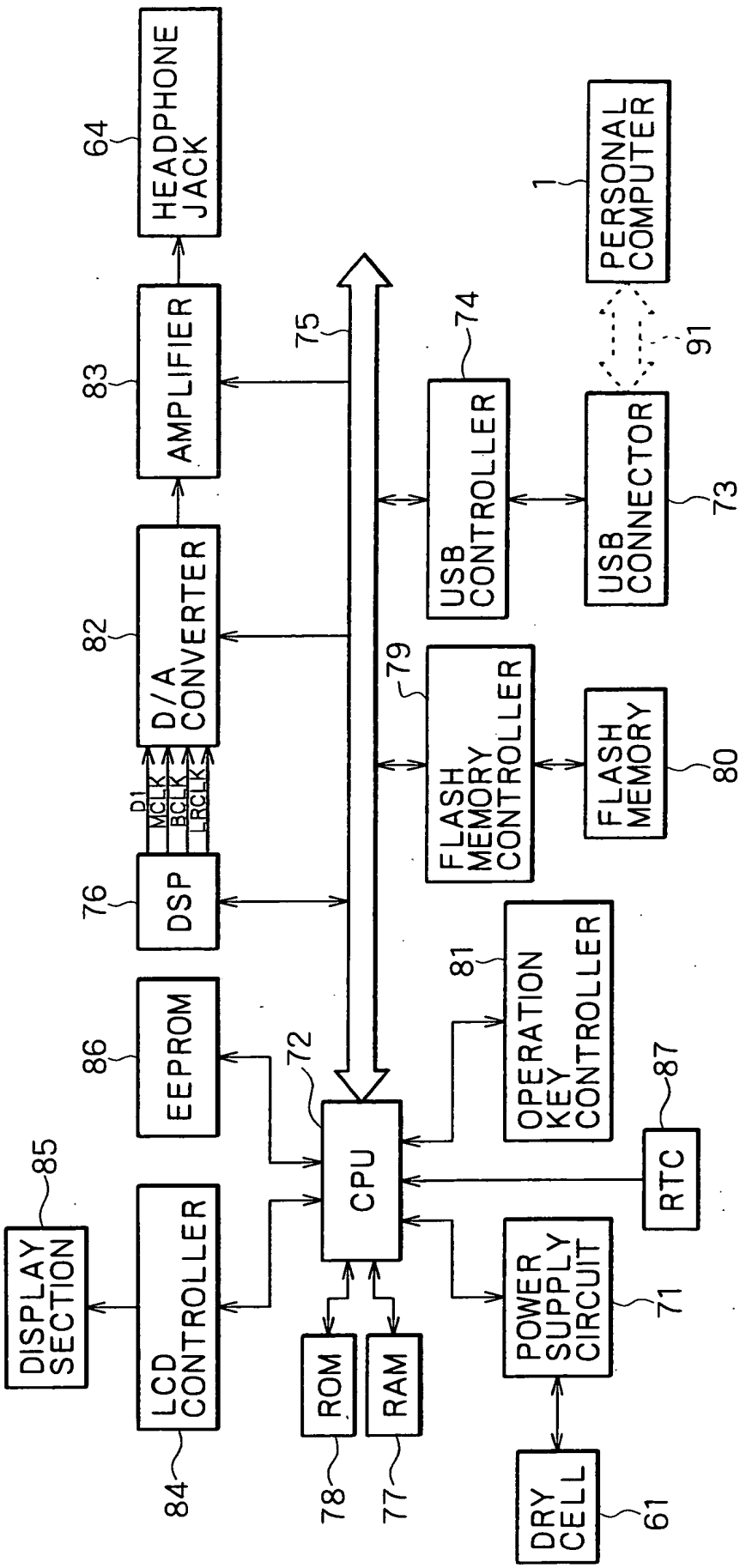

HEADPHONE JACK
64
AMPLIFIER
83
D/A CONVERTER
82
DSP
76
P1
MCLK
BCLK
LRCLK
EEPROM
86
CPU
72
LCD CONTROLLER
84
DISPLAY SECTION
85
ROM
78
RAM
77
POWER SUPPLY CIRCUIT
71
DRY CELL
61
RTC
87
OPERATION KEY CONTROLLER
81
FLASH MEMORY CONTROLLER
79
FLASH MEMORY
80
USB CONTROLLER
74
USB CONNECTOR
73
75
PERSONAL COMPUTER
1
91

FIG. 11

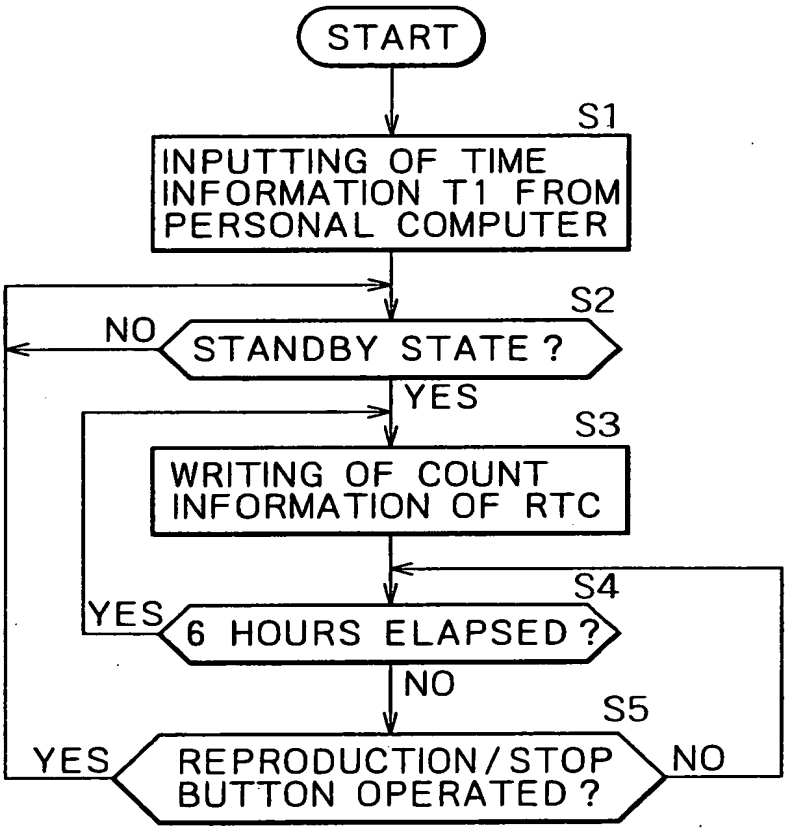
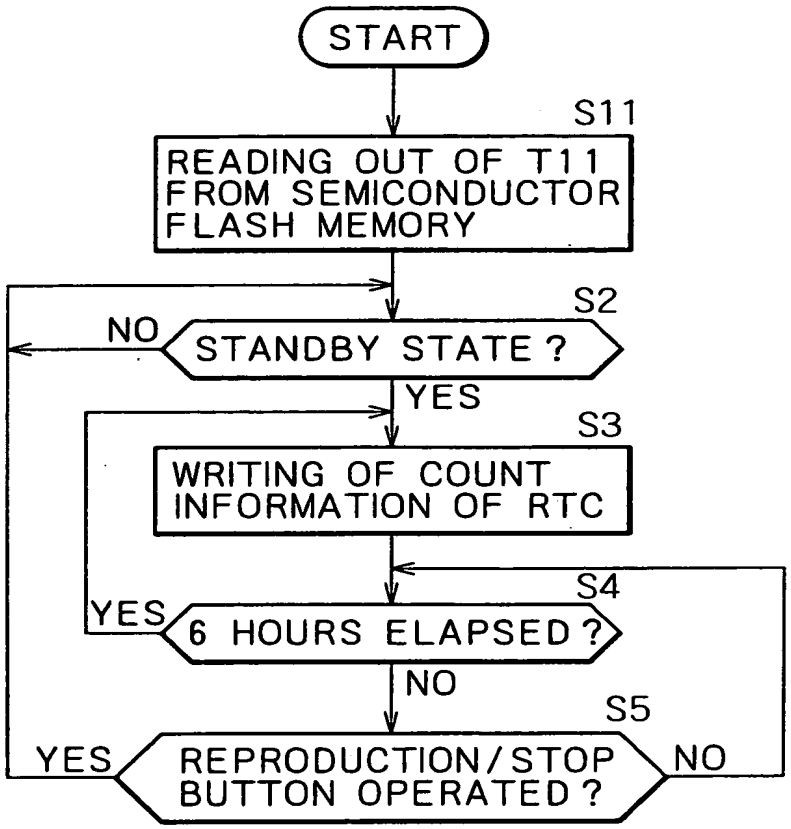

START
S1
INPUTTING OF TIME INFORMATION T1 FROM PERSONAL COMPUTER
S2
NO
STANDBY STATE ?
YES
S3
WRITING OF COUNT INFORMATION OF RTC
S4
YES
6 HOURS ELAPSED ?
NO
S5
YES
REPRODUCTION / STOP BUTTON OPERATED ?
NO

FIG. 12


START
S11
READING OUT OF T11 FROM SEMICONDUCTOR FLASH MEMORY
S2
NO
STANDBY STATE ?
YES
S3
WRITING OF COUNT INFORMATION OF RTC
S4
YES
6 HOURS ELAPSED ?
NO
S5
YES
REPRODUCTION/STOP BUTTON OPERATED ?
NO